

CLAIMS:

1. An endcap for use on an actuator arm carrying a single head gimbal assembly, the endcap comprising:
a body; and
a shielding feature extending from the body for reducing windage excitation of the head gimbal assembly.
2. The endcap of claim 1 wherein the endcap is connected to the actuator arm at the body.
3. The endcap of claim 2, wherein the shielding feature includes a balancing portion and a shielding portion.
4. The endcap of claim 3 wherein the body is connected to the actuator arm, and the shielding feature is not connected to the actuator arm.
5. The endcap of claim 4 wherein the balancing portion is shaped so the endcap is symmetric with respect to the shielding portion and the balancing portion.
6. The endcap of claim 1, wherein the shielding feature is structured to divert an airflow proximate to a portion of the head gimbal assembly that experiences windage excitation.
7. The endcap of claim 6 wherein the shield is structured to divert airflow away from a windward side of the head gimbal assembly.

8. The endcap of claim 1 wherein the head gimbal assembly further comprises a load beam, a gimbal, a transducing head, and a flexible interconnect circuit, and wherein the shielding feature is structured to divert an airflow proximate to a critical portion of the flexible interconnect circuit.

9. The endcap of claim 1 disposed in relation to an X, Y and Z coordinate system, wherein an airflow in a substantially Z direction causes excitation of the head gimbal assembly, the shielding feature having a shape disposed in an X-Y plane for controlling the airflow.

10. The endcap of claim 1 disposed in relation to an X, Y and Z coordinate system, wherein an airflow in a substantially Y direction causes excitation of the head gimbal assembly, the shielding feature having a shape disposed in an X-Z plane for controlling the airflow.

11. A head actuation system comprising:
an actuator arm;
a head gimbal assembly for carrying a transducing head, the head gimbal assembly connected to the actuator arm; and
a shield attached to the actuator arm for reducing airflow excitation of the head gimbal assembly.

12. The head actuation system of claim 11 wherein the head gimbal assembly comprises:

a baseplate functioning as the shield, the baseplate having a body portion attached to the actuator arm and a shielding portion for reducing airflow excitation of the head gimbal assembly;

a load beam, wherein the baseplate is attached to a first end of the load beam;
a flexible interconnect circuit adjacent to the load beam and electrically connected to the transducing head;
a gimbal attached to a second end of the load beam; and
a slider supported by the gimbal, the slider disposed to support the transducing head.

13. The head actuation system of claim 11 wherein the shield comprises an endcap having a body and a symmetrical protrusion from the body.
14. The head actuation system of claim 13 wherein the protrusion is T-shaped.
15. The head actuation system of claim 11 wherein the shield comprises an endcap having a body and a plurality of protrusions from the body.
16. The head actuation system of claim 15 wherein the endcap is symmetrical with respect to an axis extending along a center length of the load beam.
17. The head actuation system of claim 16 wherein the protrusions form substantially a "C" shape.
18. The head actuation system of claim 17 wherein each protrusion has a first portion and a distal portion, the first portion defines a plane, and the distal portion is non-planar with the first portion.

19. A shielded head actuation system comprising:
 - a rotatable actuator arm;
 - a head gimbal assembly;
 - a rotatable magnetic disc; and
 - a endcap comprising a body attached to the actuator arm and a symmetrically balanced shape feature.
20. The shielded head actuation system of claim 19 wherein the symmetrically balanced shape feature is disposed proximate to an excitable portion of the head gimbal assembly to control excitation of the head gimbal assembly caused by airflow generated by rotating the magnetic disc.